GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: August 9, 2003, 16:11:13 ; Search time 45.2571 Seconds
(without alignments)
56.115 Million cell updates/sec

Title: US-09-905-691-4
Perfect score: 16
Sequence: 1 ARRAARAAARRARAEA 16

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 1107863 seqs, 158726573 residues

Word size : 0

Total number of hits satisfying chosen parameters: 1107863

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : A_Geneseq_19Jun03:*
1: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1980.DAT:*
2: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1981.DAT:*
3: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1982.DAT:*
4: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1983.DAT:*
5: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1984.DAT:*
6: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1985.DAT:*
7: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1986.DAT:*
8: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1987.DAT:*
9: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1988.DAT:*
10: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1989.DAT:*
11: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1990.DAT:*
12: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1991.DAT:*
13: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1992.DAT:*
14: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1993.DAT:*
15: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1994.DAT:*
16: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1995.DAT:*
17: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1996.DAT:*
18: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1997.DAT:*
19: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1998.DAT:*
20: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1999.DAT:*
21: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA2000.DAT:*
22: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA2001.DAT:*
23: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA2002.DAT:*
24: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA2003.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB	ID	Description
1	16	100.0	16	23	AAB71430	Peptide Tris-Arg H
2	16	100.0	19	21	AAY87840	Heparin binding pe
3	16	100.0	19	23	AAB71428	Peptide Bis-Arg He
4	15	93.8	15	23	AAB71432	Peptide Arg Helix
5	9	56.2	19	21	AAY87834	Heparin binding pe
6	9	56.2	92	20	AAY39179	M. tuberculosis an
7	9	56.2	92	20	AAY39036	M. tuberculosis re
8	9	56.2	105	23	ABU05688	M. tuberculosis an
9	9	56.2	160	20	AAY39186	M. tuberculosis an
10	9	56.2	160	20	AAY39043	M. tuberculosis re
11	8	50.0	15	21	AAB08179	Peptide modulating
12	8	50.0	71	22	AAU46667	Propionibacterium
13	8	50.0	262	23	ABJ10474	Breast cancer - CA
14	8	50.0	262	23	AAU10338	Novel human CASB74
15	8	50.0	262	24	AAE33614	Human CASB7439 pro
16	8	50.0	272	22	AAU49513	Propionibacterium
17	8	50.0	361	23	AAU10339	Novel human CASB74
18	8	50.0	617	22	AAU51578	Propionibacterium
19	7	43.8	11	20	AAY25078	Transduction prote
20	7	43.8	11	21	AAB29419	Synthetic transduc
21	7	43.8	11	21	AAY93547	Amino acid sequenc
22	7	43.8	11	22	AAE05278	Human immunodefici
23	7	43.8	11	23	AAU76085	Peptide transport
24	7	43.8	11	24	ABP56078	Protein transducti
25	7	43.8	19	19	AAW41503	Heparin binding pe
26	7	43.8	19	21	AAY87836	Heparin binding pe
27	7	43.8	19	23	AAB71429	Peptide Bis-Arg He
28	7	43.8	21	19	AAW41506	Heparin binding pe
29	7	43.8	21	21	AAY87839	Heparin binding pe
30	7	43.8	21	24	ABU07934	H. influenzae Hap
31	7	43.8	47	20	AAY41497	Fragment of human
32	7	43.8	59	22	AAU61928	Propionibacterium
33	7	43.8	94	21	AAG18963	Zea mays protein f
34	7	43.8	107	22	AAU30650	Novel human secret
35	7	43.8	120	22	AAB76872	Human lung tumour
36	7	43.8	120	23	AAU85527	L801P lung tumour
37	7	43.8	120	24	ABU69499	Human lung cancer-
38	7	43.8	120	24	ABU66401	Lung cancer therap
39	7	43.8	121	21	AAB42466	Human ORFX ORF2230
40	7	43.8	124	23	ABG60198	Human DITHP polype
41	7	43.8	161	23	ABP41851	Human ovarian anti
42	7	43.8	162	21	AAG26000	Zea mays protein f
43	7	43.8	202	22	ABG08277	Novel human diagno
44	7	43.8	205	20	AAY41495	Fragment of human
45	7	43.8	240	21	AAB42380	Human ORFX ORF2144

ALIGNMENTS

RESULT 1
AAB71430
ID AAB71430 standard; peptide; 16 AA.
XX
AC AAB71430;
XX
DT 27-NOV-2002 (first entry)
XX
DE Peptide Tris-Arg Helix #3 fragment.
XX
KW Sepsis; branched chain peptide; antibacterial; immunosuppressive;
KW endotoxin; helix peptide.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 16
FT /note= "Ala is modified by unidentified R1 group"
XX
PN EP1232754-A2.
XX
PD 21-AUG-2002.
XX
PF 14-FEB-2002; 2002EP-0251027.
XX
PR 14-FEB-2001; 2001US-268410P.
XX
PA (COMM-) COMMONWEALTH BIOTECHNOLOGIES INC.
XX
PI Harris RB, Wolz RL, Wolz G;
XX
DR WPI; 2002-659478/71.

XX
PT Use of cationic helix peptides for treatment of sepsis and for the
PT detection and removal of endotoxins -
XX
PS Disclosure; Fig 1B; 18pp; English.
XX
CC This invention describes a novel use of antibacterial and
CC immunosuppressive peptides designated Arg Helix 2, Bis Arg Helix 2,
CC Tetra-Arg Helix 2 or Tris-Arg Helix 3 for the manufacture of a medicament
CC for the treatment of sepsis and the detection and removal of endotoxins.
CC The peptides of the invention are used in a method for detecting
CC endotoxin in a sample comprising contacting the sample with a labelled
CC helix peptide and then detecting the presence of any labelled molecule
CC bound to endotoxin. The peptides can also be used in a method for
CC removing endotoxin in a sample which comprises exposing the sample to a
CC helix peptide, bound to a solid support, then collecting the sample. The
CC endotoxin removal may be in vivo, or the peptides may be used to form an
CC affinity trap for endotoxins in e.g. dialysis-type treatments, or for
CC removal of endotoxins from plasma fractionation products. They are also
CC used as model frameworks for endotoxin binding from which new analogues
CC may be designed. This sequence represents the peptide Arg Helix #3 which
CC is used in the construction of Tris-Arg Helix #3, a branched chain
CC peptide described in the method of the invention.
XX
SQ Sequence 16 AA;

Query Match 100.0%; Score 16; DB 23; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.2e-07;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ARRAARAAARRARAEA 16
||||||||||||||||
Db 1 ARRAARAAARRARAEA 16

RESULT 2
AAY87840
ID AAY87840 standard; peptide; 19 AA.
XX
AC AAY87840;
XX
DT 01-SEP-2000 (first entry)
XX
DE Heparin binding peptide Bis-Arg helix #2.
XX
KW Heparin binding peptide; antagonist; cardiovascular; coagulant;
KW bleeding wound; vascular anastomoses; leaking prosthetic vascular graft;
KW protamine substitute; treatment.
XX
OS Synthetic.
XX
PN EP999219-A2.
XX
PD 10-MAY-2000.
XX
PF 01-OCT-1999; 99EP-0119514.
XX
PR 06-OCT-1998; 98US-0166930.
XX
PA (COMM-) COMMONWEALTH BIOTECHNOLOGIES INC.
XX
PI Harris RB, Sobel M;
XX
DR WPI; 2000-306006/27.
XX
PT New heparin binding molecules, useful for reducing heparin content in a
PT mammal by reducing the anticoagulant effects of heparin -
XX
PS Example 1; Fig 1a; 39pp; English.
XX
CC This invention describes novel heparin binding molecules (I). The
CC molecules (I) are useful as heparin antagonist drugs for cardiovascular
CC application and specifically neutralize heparin's conventional
CC anticoagulant properties. (I) are also useful for counteracting actions
CC of heparin locally e.g. in bleeding wounds, vascular anastomoses or
CC leaking prosthetic vascular grafts. (I) is also useful combined in a
CC pharmaceutical composition with insulin, as a substitute for protamine
CC for use in treating diabetics. The heparin binding molecules (I)
CC specifically neutralize heparin's conventional anticoagulant properties
CC without causing deleterious hemodynamic side-effects or exacerbation of
CC the proliferative vascular response to injury. (I) are short-duration,
CC intravenous drugs to be used in elective or emergency situations which
CC can safely and specifically neutralize heparin's proliferative response
CC to injury. This sequence represents a heparin-binding peptide described
CC in the method of the invention.
XX
SQ Sequence 19 AA;

Query Match 100.0%; Score 16; DB 21; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.4e-07;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ARRAARAAARRARAEA 16
||||||||||||||||
Db 4 ARRAARAAARRARAEA 19

RESULT 3
AAB71428
ID AAB71428 standard; peptide; 19 AA.
XX
AC AAB71428;
XX
DT 27-NOV-2002 (first entry)
XX
DE Peptide Bis-Arg Helix #2 fragment #1.
XX
KW Sepsis; branched chain peptide; antibacterial; immunosuppressive;
KW endotoxin; helix peptide.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 19
FT /note= "Ala is modified by unidentified R1 group"
XX
PN EP1232754-A2.
XX
PD 21-AUG-2002.
XX
PF 14-FEB-2002; 2002EP-0251027.
XX
PR 14-FEB-2001; 2001US-268410P.
XX
PA (COMM-) COMMONWEALTH BIOTECHNOLOGIES INC.
XX
PI Harris RB, Wolz RL, Wolz G;
XX
DR WPI; 2002-659478/71.
XX
PT Use of cationic helix peptides for treatment of sepsis and for the
PT detection and removal of endotoxins -
XX
PS Disclosure; Fig 1A; 18pp; English.
XX
CC This invention describes a novel use of antibacterial and
CC immunosuppressive peptides designated Arg Helix 2, Bis Arg Helix 2,
CC Tetra-Arg Helix 2 or Tris-Arg Helix 3 for the manufacture of a medicament
CC for the treatment of sepsis and the detection and removal of endotoxins.
CC The peptides of the invention are used in a method for detecting
CC endotoxin in a sample comprising contacting the sample with a labelled
CC helix peptide and then detecting the presence of any labelled molecule
CC bound to endotoxin. The peptides can also be used in a method for
CC removing endotoxin in a sample which comprises exposing the sample to a
CC helix peptide, bound to a solid support, then collecting the sample. The
CC endotoxin removal may be in vivo, or the peptides may be used to form an

CC affinity trap for endotoxins in e.g. dialysis-type treatments, or for
CC removal of endotoxins from plasma fractionation products. They are also
CC used as model frameworks for endotoxin binding from which new analogues
CC may be designed. This sequence represents the peptide Arg Helix #2 which
CC is used in the construction of Bis-Arg Helix #2, a branched chain peptide
CC described in the method of the invention.
XX
SQ Sequence 19 AA;

Query Match 100.0%; Score 16; DB 23; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.4e-07;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ARRAARAAARRARAEA 16
||||||||||||||||
Db 4 ARRAARAAARRARAEA 19

RESULT 4
AAB71432
ID AAB71432 standard; peptide; 15 AA.
XX
AC AAB71432;
XX
DT 27-NOV-2002 (first entry)
XX
DE Peptide Arg Helix #3 for construction of Tris-Arg helix #3.
XX
KW Sepsis; branched chain peptide; antibacterial; immunosuppressive;
KW endotoxin; helix peptide.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 1
FT /note= "This residue has a side chain
FT C(O)-NepsilonH-(CH2)3-Tris-ArgHel#3, where
FT the Tris-ArgHel#3 is represented in AAB71431"
FT Modified-site 16
FT /note= "Acylated residue"
XX
PN EP1232754-A2.
XX
PD 21-AUG-2002.
XX
PF 14-FEB-2002; 2002EP-0251027.
XX
PR 14-FEB-2001; 2001US-268410P.
XX
PA (COMM-) COMMONWEALTH BIOTECHNOLOGIES INC.
XX
PI Harris RB, Wolz RL, Wolz G;
XX
DR WPI; 2002-659478/71.
XX
PT Use of cationic helix peptides for treatment of sepsis and for the
PT detection and removal of endotoxins -
XX
PS Disclosure; Fig 2; 18pp; English.
XX
CC This invention describes a novel use of antibacterial and
CC immunosuppressive peptides designated Arg Helix 2, Bis Arg Helix 2,
CC Tetra-Arg Helix 2 or Tris-Arg Helix 3 for the manufacture of a medicament
CC for the treatment of sepsis and the detection and removal of endotoxins.
CC The peptides of the invention are used in a method for detecting
CC endotoxin in a sample comprising contacting the sample with a labelled
CC helix peptide and then detecting the presence of any labelled molecule
CC bound to endotoxin. The peptides can also be used in a method for
CC removing endotoxin in a sample which comprises exposing the sample to a
CC helix peptide, bound to a solid support, then collecting the sample. The
CC endotoxin removal may be in vivo, or the peptides may be used to form an
CC affinity trap for endotoxins in e.g. dialysis-type treatments, or for
CC removal of endotoxins from plasma fractionation products. They are also
CC used as model frameworks for endotoxin binding from which new analogues
CC may be designed. This sequence represents the peptide Arg Helix #3 which
CC is used in the construction of the branched chain peptide Tris-Arg Helix
CC #3 described in the method of the invention.
XX
SQ Sequence 15 AA;

Query Match 93.8%; Score 15; DB 23; Length 15;
Best Local Similarity 100.0%; Pred. No. 8.5e-07;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 RRAARAAARRARAEA 16
|||||||||||||||
Db 1 RRAARAAARRARAEA 15

RESULT 5
AAY87834
ID AAY87834 standard; peptide; 19 AA.
XX
AC AAY87834;
XX
DT 01-SEP-2000 (first entry)
XX
DE Heparin binding peptide Arg helix #1.
XX
KW Heparin binding peptide; antagonist; cardiovascular; coagulant;
KW bleeding wound; vascular anastomoses; leaking prosthetic vascular graft;
KW protamine substitute; treatment.
XX
OS Synthetic.
XX
PN EP999219-A2.
XX
PD 10-MAY-2000.
XX
PF 01-OCT-1999; 99EP-0119514.
XX
PR 06-OCT-1998; 98US-0166930.
XX
PA (COMM-) COMMONWEALTH BIOTECHNOLOGIES INC.
XX
PI Harris RB, Sobel M;
XX
DR WPI; 2000-306006/27.
XX
PT New heparin binding molecules, useful for reducing heparin content in a
PT mammal by reducing the anticoagulant effects of heparin -
XX
PS Example 1; Page 7; 39pp; English.
XX
CC This invention describes novel heparin binding molecules (I). The
CC molecules (I) are useful as heparin antagonist drugs for cardiovascular
CC application and specifically neutralize heparin's conventional
CC anticoagulant properties. (I) are also useful for counteracting actions
CC of heparin locally e.g. in bleeding wounds, vascular anastomoses or
CC leaking prosthetic vascular grafts. (I) is also useful combined in a
CC pharmaceutical composition with insulin, as a substitute for protamine
CC for use in treating diabetics. The heparin binding molecules (I)
CC specifically neutralize heparin's conventional anticoagulant properties
CC without causing deleterious hemodynamic side-effects or exacerbation of
CC the proliferative vascular response to injury. (I) are short-duration,
CC intravenous drugs to be used in elective or emergency situations which
CC can safely and specifically neutralize heparin's proliferative response
CC to injury. This sequence represents a heparin-binding peptide described
CC in the method of the invention.
XX
SQ Sequence 19 AA;

Query Match 56.2%; Score 9; DB 21; Length 19;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          4 AARAAARRA 12
              |||||||||
Db          4 AARAAARRA 12


RESULT 6
AAY39179
ID   AAY39179 standard; Protein; 92 AA.
XX
AC   AAY39179;
XX
DT   05-NOV-1999  (first entry)
XX
DE   M. tuberculosis antigen 5' MO-4 amino acid sequence.
XX
KW   Mycobacterium tuberculosis; M. tuberculosis; antigen; immunogen;
KW   immunotherapy; diagnosis; immunisation; vaccine; infection;
KW   immune response; skin test.
XX
OS   Mycobacterium tuberculosis.
XX
PN   WO9942076-A2.
XX
PD   26-AUG-1999.
XX
PF   17-FEB-1999;   99WO-US03268.
XX
PR   05-MAY-1998;   98US-0072967.
PR   18-FEB-1998;   98US-0025197.
XX
PA   (CORI-) CORIXA CORP.
XX
PI   Campos-Neto A,  Dillon DC,  Hendrickson RC,  Houghton R;
PI   Lodes MJ,  Reed SG,  Skeiky YAW,  Twardzik DR,  Vedvick TS;
XX
DR   WPI; 1999-527409/44.
DR   N-PSDB; AAZ19371.
XX
PT   New antigens from Mycobacterium tuberculosis useful in diagnostic
PT   skin tests and protective or therapeutic vaccines or compositions
XX
PS   Example 5; Page 214; 299pp; English.
XX
CC   The present invention describes polypeptides comprising an immunogenic
CC   part of a Mycobacterium tuberculosis antigen (Ag). Also described
CC   are vaccines and fusion protein containing M. tuberculosis Ag's.
CC   M. tuberculosis Ag's, DNAs encoding them, derived fusion proteins and
CC   other polypeptides fragments, can be used in pharmaceutical compositions
CC   or vaccines to generate a protective or therapeutic immune response to
CC   M. tuberculosis and as reagents in skin tests for diagnosis of
CC   tuberculosis. Ag can induce proliferation of, or cytokine secretion
CC   by, T, B or natural killer cells and/or macrophages in
CC   tuberculosis-immune subjects. AAZ19249 to AAZ19460 and AAY39083 to
CC   AAY39225 are used in the exemplification of the present invention.
XX
SQ   Sequence   92 AA;

  Query Match             56.2%;  Score 9;  DB 20;  Length 92;
  Best Local Similarity   100.0%;  Pred. No. 0.51;
  Matches    9;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          7 AAARRARAE 15
              |||||||||
Db         39 AAARRARAE 47


RESULT 7
AAY39036
ID   AAY39036 standard; Protein; 92 AA.
XX
AC   AAY39036;
XX
DT   05-NOV-1999  (first entry)
XX
DE   M. tuberculosis recombinant antigen protein MO-4.
XX
KW   Antigen; diagnosis; detection; infection; antibody; immunisation;
KW   vaccine; immunity.
XX
OS   Mycobacterium tuberculosis.
XX
PN   WO9942118-A2.
XX
PD   26-AUG-1999.
XX
PF   17-FEB-1999;   99WO-US03265.
XX
PR   05-MAY-1998;   98US-0072596.
PR   18-FEB-1998;   98US-0024753.
XX
PA   (CORI-) CORIXA CORP.
XX
PI   Campos-Neto A,  Dillon DC,  Hendrickson RC,  Houghton R;
PI   Lodes MJ,  Reed SG,  Skeiky YAW,  Twardzik DR,  Vedvick TS;
XX
DR   WPI; 1999-527416/44.
XX
PT   New polypeptide comprising antigenic portions of M. tuberculosis
XX
PS   Example 5; Page 259; 323pp; English.
XX
CC   This invention describes novel recombinant antigens and their encoding
CC   nucleic acids derived from Mycobacterium tuberculosis. The novel
CC   polypeptides are useful for detecting M. tuberculosis infection in a
CC   biological sample by detecting antibodies which bind with the
CC   polypeptides, and are useful as vaccines for immunizing against
CC   M. tuberculosis infection. The new detection methods are needed as
CC   current vaccination strategies do not provide 100% immunity.
XX
SQ   Sequence   92 AA;

  Query Match             56.2%;  Score 9;  DB 20;  Length 92;
  Best Local Similarity   100.0%;  Pred. No. 0.51;
  Matches    9;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          7 AAARRARAE 15
              |||||||||
Db         39 AAARRARAE 47


RESULT 8
ABU05688
ID   ABU05688 standard; Protein; 105 AA.
XX
AC   ABU05688;
XX
DT   08-APR-2003  (first entry)
XX
DE   M. tuberculosis and M. leprae marker protein #339.
XX
KW   Mycobacterioses; survival; virulence; protective antigen; vaccine;
KW   mycobacterial disease; tuberculosis; leprosy.
XX
OS   Mycobacterium tuberculosis.
OS   Mycobacterium leprae.
XX
PN   WO200274903-A2.
XX
PD   26-SEP-2002.
XX
PF   22-FEB-2002; 2002WO-IB01973.
XX
PR   22-FEB-2001; 2001US-270123P.
XX
PA   (INSP ) INST PASTEUR.
XX
```

PI Cole S;
XX
DR WPI; 2002-759885/82.
XX
PT Identifying and selecting genes for survival or virulence of
PT mycobacteria by a comparative genomic analysis of the sequences of
PT Mycobacterium tuberculosis and M. leprae -
XX
PS Claim 17; Page 536; 874pp; English.
XX
CC This invention relates to a novel method for identifying essential genes
CC for survival or virulence of mycobacteria species. The method comprises
CC aligning the genomic sequence of a first mycobacterium species on a
CC genomic sequence of a second mycobacterium species and selecting a
CC polynucleotide sequence that is highly conserved in both genomes with no
CC counterparts in other bacterial genomic sequences and that corresponds
CC to an essential gene for the survival or virulence of mycobacterium
CC species. The method of the invention is useful for detecting M.
CC tuberculosis or M. leprae infection. The method reduces the number of
CC potential new targets and protective antigens for new drugs and vaccine
CC compositions to treat and prevent mycobacterial diseases, particularly
CC tuberculosis and leprosy. The present sequence represents a marker
CC protein from Mycobacterium tuberculosis and Mycobacterium leprae
CC identified using the method of the invention.
XX
SQ Sequence 105 AA;

Query Match 56.2%; Score 9; DB 23; Length 105;
Best Local Similarity 100.0%; Pred. No. 0.57;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 7 AAARRARAE 15
|||||||||
Db 19 AAARRARAE 27

RESULT 9
AAY39186
ID AAY39186 standard; Protein; 160 AA.
XX
AC AAY39186;
XX
DT 05-NOV-1999 (first entry)
XX
DE M. tuberculosis antigen 5' MO-34 amino acid sequence.
XX
KW Mycobacterium tuberculosis; M. tuberculosis; antigen; immunogen;
KW immunotherapy; diagnosis; immunisation; vaccine; infection;
KW immune response; skin test.
XX
OS Mycobacterium tuberculosis.
XX
PN WO9942076-A2.
XX
PD 26-AUG-1999.
XX
PF 17-FEB-1999; 99WO-US03268.
XX
PR 05-MAY-1998; 98US-0072967.
PR 18-FEB-1998; 98US-0025197.
XX
PA (CORI-) CORIXA CORP.
XX
PI Campos-Neto A, Dillon DC, Hendrickson RC, Houghton R;
PI Lodes MJ, Reed SG, Skeiky YAW, Twardzik DR, Vedvick TS;
XX
DR WPI; 1999-527409/44.
DR N-PSDB; AAZ19378.
XX
PT New antigens from Mycobacterium tuberculosis useful in diagnostic
PT skin tests and protective or therapeutic vaccines or compositions
XX
PS Example 5; Page 217-218; 299pp; English.
XX
CC The present invention describes polypeptides comprising an immunogenic
CC part of a Mycobacterium tuberculosis antigen (Ag). Also described
CC are vaccines and fusion protein containing M. tuberculosis Ag's.
CC M. tuberculosis Ag's, DNAs encoding them, derived fusion proteins and
CC other polypeptides fragments, can be used in pharmaceutical compositions
CC or vaccines to generate a protective or therapeutic immune response to
CC M. tuberculosis and as reagents in skin tests for diagnosis of
CC tuberculosis. Ag can induce proliferation of, or cytokine secretion
CC by, T, B or natural killer cells and/or macrophages in
CC tuberculosis-immune subjects. AAZ19249 to AAZ19460 and AAY39083 to
CC AAY39225 are used in the exemplification of the present invention.
XX
SQ Sequence 160 AA;

Query Match 56.2%; Score 9; DB 20; Length 160;
Best Local Similarity 100.0%; Pred. No. 0.79;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 7 AAARRARAE 15
|||||||||
Db 31 AAARRARAE 39

RESULT 10
AAY39043
ID AAY39043 standard; Protein; 160 AA.
XX
AC AAY39043;
XX
DT 05-NOV-1999 (first entry)
XX
DE M. tuberculosis recombinant antigen protein MO-34.
XX
KW Antigen; diagnosis; detection; infection; antibody; immunisation;
KW vaccine; immunity.
XX
OS Mycobacterium tuberculosis.
XX
PN WO9942118-A2.
XX
PD 26-AUG-1999.
XX
PF 17-FEB-1999; 99WO-US03265.
XX
PR 05-MAY-1998; 98US-0072596.
PR 18-FEB-1998; 98US-0024753.
XX
PA (CORI-) CORIXA CORP.
XX
PI Campos-Neto A, Dillon DC, Hendrickson RC, Houghton R;
PI Lodes MJ, Reed SG, Skeiky YAW, Twardzik DR, Vedvick TS;
XX
DR WPI; 1999-527416/44.
XX
PT New polypeptide comprising antigenic portions of M. tuberculosis
XX
PS Example 5; Page 263; 323pp; English.
XX
CC This invention describes novel recombinant antigens and their encoding
CC nucleic acids derived from Mycobacterium tuberculosis. The novel
CC polypeptides are useful for detecting M. tuberculosis infection in a
CC biological sample by detecting antibodies which bind with the
CC polypeptides, and are useful as vaccines for immunizing against
CC M. tuberculosis infection. The new detection methods are needed as
CC current vaccination strategies do not provide 100% immunity.
XX
SQ Sequence 160 AA;

Query Match 56.2%; Score 9; DB 20; Length 160;
Best Local Similarity 100.0%; Pred. No. 0.79;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          7 AAARRARAE 15
              |||||||||
Db         31 AAARRARAE 39


RESULT 11
AAB08179
ID   AAB08179 standard; peptide; 15 AA.
XX
AC   AAB08179;
XX
DT   04-DEC-2000  (first entry)
XX
DE   Peptide modulating activity of heparin, and other glycans.
XX
KW   Glycoaminoglycan; proteoglycan; heparin modulation; anticoagulant;
KW   cell attachment; cell adhesion; vein graft; tumour cell metastasis;
KW   cartilage differentiation; wound healing.
XX
OS   Synthetic.
XX
PN   WO200045831-A1.
XX
PD   10-AUG-2000.
XX
PF   02-FEB-2000; 2000WO-US02853.
XX
PR   02-FEB-1999;   99US-0118276.
XX
PA   (UYJE-) UNIV JEFFERSON THOMAS.
XX
PI   San Antonio JD,  Verrecchio A,  Schick BP;
XX
DR   WPI; 2000-543446/49.
XX
PT   Novel synthetic peptides with high affinity for glycoaminoglycans and
PT   proteoglycans, useful for modulating heparin, promoting cell
PT   attachment, modulating tumour metastasis and modulating wound healing -
XX
PS   Disclosure; Page 31; 76pp; English.
XX
CC   The present sequence represents a synthetic peptide which has a high
CC   affinity for glycoaminoglycans and proteoglycans. The peptide is useful
CC   in methods for modulating heparin or other glycoaminoglycans with
CC   anticoagulant activity, promoting cell attachment or adhesion to
CC   natural or synthetic surfaces (especially vein grafts), modulating
CC   tumour cell metastasis, modulating cartilage differentiation, targeting
CC   drugs to epithelial cell surfaces (or to other cells expressing
CC   proteoglycans), modulating enzymes that act on glycoaminoglycan
CC   substrates, affinity purification of bioactive sequences of a
CC   glycoaminoglycan, modifying endothelial cell pro-coagulant or
CC   anti-coagulant functions mediated through glycoaminoglycans, and
CC   modulating wound healing. The peptide may also be used for blocking
CC   tissue uptake of heparin or other glycoaminoglycans in a mammal to
CC   increase heparin half-life in circulation.
XX
SQ   Sequence   15 AA;

  Query Match             50.0%;  Score 8;  DB 21;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 0.92;
  Matches    8;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          7 AAARRARA 14
              ||||||||
Db          1 AAARRARA 8


RESULT 12
AAU46667
ID   AAU46667 standard; Protein; 71 AA.
XX
AC   AAU46667;
XX
DT   27-FEB-2002  (first entry)
XX
DE   Propionibacterium acnes immunogenic protein #7563.
XX
KW   SAPHO syndrome; synovitis; acne; pustulosis; hypertosis; osteomyelitis;
KW   uveitis; endophthalmitis; bone; joint; central nervous system; ELISA;
KW   inflammatory lesion; acne vulgaris; enzyme linked immunosorbent assay;
KW   dermatological; osteopathic; neuroprotectant.
XX
OS   Propionibacterium acnes.
XX
PN   WO200181581-A2.
XX
PD   01-NOV-2001.
XX
PF   20-APR-2001; 2001WO-US12865.
XX
PR   21-APR-2000; 2000US-199047P.
PR   02-JUN-2000; 2000US-208841P.
PR   07-JUL-2000; 2000US-216747P.
XX
PA   (CORI-) CORIXA CORP.
XX
PI   Skeiky YAW,  Persing DH,  Mitcham JL,  Wang SS,  Bhatia A;
PI   L'maisonneuve J,  Zhang Y,  Jen S,  Carter D;
XX
DR   WPI; 2001-616774/71.
DR   N-PSDB; AAS59534.
XX
PT   Propionibacterium acnes polypeptides and nucleic acids useful for
PT   vaccinating against and diagnosing infections, especially useful for
PT   treating acne vulgaris -
XX
PS   Example 1; SEQ ID No 7862; 1069pp; English.
XX
CC   Sequences AAU39105-AAU68017 represent Propionibacterium acnes immunogenic
CC   polypeptides. The proteins and their associated DNA sequences are used in
CC   the treatment, prevention and diagnosis of medical conditions caused by
CC   P. acnes. The disorders include SAPHO syndrome (synovitis, acne,
CC   pustulosis, hypertosis and osteomyelitis), uveitis and endophthalmitis.
CC   P. acnes is also involved in infections of bone, joints and the central
CC   nervous system, however it is particularly involved in the inflammatory
CC   lesions associated with acne vulgaris. A method for detecting the
CC   presence or absence of P. acnes in a patient comprises contacting a
CC   sample with a binding agent that binds to the proteins of the invention
CC   and determining the amount of bound protein in the sample. The
CC   polypeptides may be used as antigens in the production of antibodies
CC   specific for P. acnes proteins. These antibodies can be used to
CC   downregulate expression and activity of P. acnes polypeptides and
CC   therefore treat P. acnes infections. The antibodies may also be used as
CC   diagnostic agents for determining P. acnes presence, for example, by
CC   enzyme linked immunosorbent assay (ELISA).
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence   71 AA;

  Query Match             50.0%;  Score 8;  DB 22;  Length 71;
  Best Local Similarity   100.0%;  Pred. No. 3.1;
  Matches    8;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          3 RAARAAAR 10
              ||||||||
Db         17 RAARAAAR 24


RESULT 13
ABJ10474
ID   ABJ10474 standard; Protein; 262 AA.
XX
AC   ABJ10474;
XX
```

DT 21-NOV-2002 (first entry)
XX
DE Breast cancer - CASB7439 related protein SEQ ID No 3.
XX
KW Cytostatic; gene therapy; vaccine; immunotherapeutic; breast carcinoma;
KW cancer; immunogen; immunisation; breast tumour; CASB7439.
XX
OS Homo sapiens.
XX
PN WO200266506-A2.
XX
PD 29-AUG-2002.
XX
PF 15-FEB-2002; 2002WO-EP01649.
XX
PR 21-FEB-2001; 2001GB-0004259.
XX
PA (SMIK) SMITHKLINE BEECHAM BIOLOGICALS.
XX
PI Vinals Y De Bassols C, Cassart J;
XX
DR WPI; 2002-674914/72.
XX
PT Use of CASB7439 polypeptides and polynucleotides, their variants,
PT immunogenic fragments and fusion proteins, for the manufacture of
PT medicaments for the prophylaxis, treatment and diagnosis of breast
PT tumors or cancer -
XX
PS Disclosure; Page 70; 115pp; English.
XX
CC The invention relates to the use of a human polynucleotide and
CC polypeptide comprising at least 70 % identity to a 1791 base pair
CC sequence over its entire length, or to a 193 residue amino acid sequence,
CC both given in the specification, for the manufacture of a medicament for
CC immunotherapeutically treating a patient suffering from or susceptible to
CC breast carcinoma. The polynucleotides and polypeptides are useful as
CC immunogens for specific prophylactic or therapeutic immunisation against
CC breast tumours. The polynucleotide of the invention can be used in gene
CC therapy. This sequence represents a protein related to the CASB7439 -
CC breast cancer proteins of the invention.
XX
SQ Sequence 262 AA;

Query Match 50.0%; Score 8; DB 23; Length 262;
Best Local Similarity 100.0%; Pred. No. 8.4;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 RRAARAAA 9
||||||||
Db 134 RRAARAAA 141

RESULT 14
AAU10338
ID AAU10338 standard; Protein; 262 AA.
XX
AC AAU10338;
XX
DT 14-FEB-2002 (first entry)
XX
DE Novel human CASB7439 protein #3.
XX
KW CASB7439; human; cytostatic; immunosuppressive; vaccine; carcinoma;
KW colon cancer; tumour; immunoprophylaxis; immune response;
KW colorectal cancer; immunogenic; autoimmune disease.
XX
OS Homo sapiens.
XX
PN WO200162778-A2.
XX
PD 30-AUG-2001.
XX
PF 16-FEB-2001; 2001WO-EP01779.
XX
PR 23-FEB-2000; 2000GB-0004269.
PR 20-APR-2000; 2000GB-0009905.
PR 25-AUG-2000; 2000GB-0021080.
XX
PA (SMIK) SMITHKLINE BEECHAM BIOLOGICALS.
XX
PI Cabezon-Silva TEV, Cassart J, Coche T, Gaulis SRJ;
PI Vinals De Bassols YC;
XX
DR WPI; 2002-041150/05.
DR N-PSDB; AAS14990.
XX
PT Novel isolated CASB7439 polypeptide useful in diagnostics, and as
PT vaccines for prophylactic and therapeutic treatment of cancers,
PT particularly colorectal cancers, autoimmune diseases and related
PT conditions -
XX
PS Claim 7; Page 71; 101pp; English.
XX
CC The invention relates to a novel isolated CASB7439 polypeptide (I).
CC (I), and its related polynucleotide (II) are useful in the manufacture of
CC a vaccine for immunotherapeutically treating a patient suffering from or
CC susceptible to carcinoma, preferably colon cancer or other colon-
CC associated tumours or diseases. (I), (II), and antibody to (I) are
CC useful for the treatment of a subject by immunoprophylaxis or therapy
CC by in vitro induction of immune responses to (I), preferably for
CC the treatment of colorectal cancer. An immunogenic composition
CC comprising (I) is useful in medicine and for inducing an immune response
CC against human CASB7439 polypeptide. (I) is useful as an immunogen to
CC produce antibodies immunospecific for (I), to identify membrane bound or
CC soluble receptors, and in a method for the structure-based design of an
CC agonist, antagonist or inhibitor of (I). (I) or (II) can be used in
CC diagnostics, and for prophylactic and therapeutic treatment of autoimmune
CC diseases and related conditions. (I) or (II) is useful for inducing, re-
CC enforcing or modulating an immune response in a mammal. (II) is useful as
CC hybridisation probes for cDNA and genomic DNA or as primers for a
CC nucleic acid amplification (PCR) reaction, to isolate full-length cDNAs
CC and genomic clones encoding (I). (II) is useful for staging
CC cancerous disorders and grading the nature of the cancerous tissue, and
CC for chromosome localisation. Antibody to (I) is useful to isolate or
CC identify clones expressing (I), to purify (I), and to prevent or treat
CC cancer, particularly colorectal cancer, autoimmune disease and related
CC conditions. The present sequence represents the amino acid sequence
CC of human CASB7439 polypeptide #3 as described in the invention.
XX
SQ Sequence 262 AA;

Query Match 50.0%; Score 8; DB 23; Length 262;
Best Local Similarity 100.0%; Pred. No. 8.4;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 RRAARAAA 9
||||||||
Db 134 RRAARAAA 141

RESULT 15
AAE33614
ID AAE33614 standard; Protein; 262 AA.
XX
AC AAE33614;
XX
DT 16-APR-2003 (first entry)
XX
DE Human CASB7439 protein #2.
XX
KW CASB7439 protein; lung cancer; NSCLC; squamous epidermoid carcinoma;
KW SCLC; adenocarcinoma; large cell carcinoma; carcinoid; mesothelioma;
KW cytostatic; bronchial gland tumour; human.
XX
OS Homo sapiens.
XX

PN WO200292627-A2.
XX
PD 21-NOV-2002.
XX
PF 07-MAY-2002; 2002WO-EP05011.
XX
PR 16-MAY-2001; 2001GB-0011974.
XX
PA (GLAX) GLAXOSMITHKLINE BIOLOGICALS SA.
XX
PI Coche T, Gaulis SRJ, Vinals De Bassols YC;
XX
DR WPI; 2003-120647/11.
DR N-PSDB; AAD51534.
XX
PT Use of a CASB7439 polynucleotide or polypeptide for manufacturing a
PT medicament for immunotherapeutically preventing or treating a patient
PT suffering from or susceptible to preneoplastic lesions of lung cancer
PT and lung cancer -
XX
PS Disclosure; Column 74-75; 55pp; English.
XX
CC The invention relates to use of CASB7439 sequences for manufacturing a
CC medicament for immunotherapeutically preventing or treating a patient
CC suffering from or susceptible to preneoplastic lesions of lung cancer,
CC and lung cancer and methods for diagnosing lesions. CASB7439 sequences
CC are useful for manufacturing a medicament for treating preneoplastic
CC lesions of lung cancer and lung cancer, such as SCLC, NSCLC (e.g. large
CC cell (undifferentiated) carcinoma), squamous (epidermoid) carcinoma,
CC carcinoids, adenocarcinoma (including bronchoalveolar), bronchial gland
CC tumours or mesotheliomas. CASB7439 DNA is used in gene therapy. The
CC present sequence is human CASB7439 protein.
XX
SQ Sequence 262 AA;

Query Match 50.0%; Score 8; DB 24; Length 262;
Best Local Similarity 100.0%; Pred. No. 8.4;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          2 RRAARAAA 9
              ||||||||
Db        134 RRAARAAA 141
```

Search completed: August 9, 2003, 16:29:07
Job time : 46.2571 secs